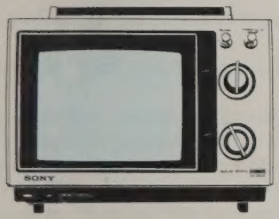
SONY®

TRINITRON® COLOR TV RECEIVER

KV-8000

PROPERTY OF DEPT. C-270
METROLOGY LAB.
DO NOT REMOVE
FROM AREA
7-28-80



OPERATING INSTRUCTIONS

Before operating the set, please read this manual thoroughly. This manual should be retained for future reference.

OWNER'S RECORD

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. KV-8000 Serial No. _____

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WARNING

To prevent fire or shock hazard, do not expose the set to rain or moisture.

Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

- Operate only on 120 V ac. For battery operation, 12 V or 24 V dc is required.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the set on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not attempt to make any of the adjustments at the small holes in the rear of the set. These are special adjustments to be performed only by qualified personnel.
- Unplug the set from the wall outlet when it will not be used for an extended period of time.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- This set is equipped with a polarized AC Socket, and the supplied AC Power Cord is equipped with a polarized plug (one blade of the plug is wider than the other), which will fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should the plug still fail to fit, contact your dealer for assistance. Do not defeat the safety purpose of the polarized plug.

NOTES

- Do not install the set in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your set. For maximum protection, repack your set as it was originally packed at the factory.
- To keep the set looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild soap solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers, since these will damage the cabinet.

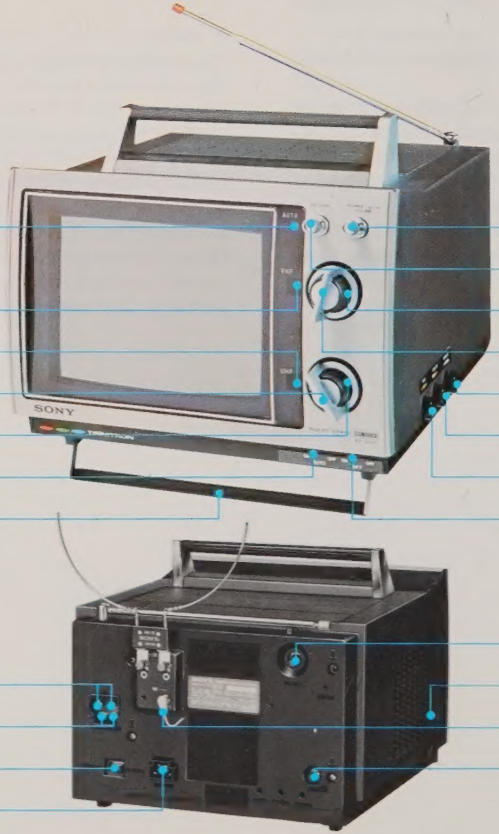
FEATURES

- Advanced new automatic circuits are built into your Sony Color TV to eliminate the necessity for frequent readjustment of the tuning and color controls.

A touch of the AFT Switch instantly activates these circuits to tune your set for peak performance: A touch of the AUTO Switch locks the color processing system to factory preset values that assure realistic reproduction of every shade and tint.

- Your Sony Color TV features the unique ECONOQUICK system, which provides a picture within seconds after the set is switched on. Unlike conventional instant-picture systems, there is absolutely no power consumption when the set is not in use. This system represents the latest development of the TRINITRON picture tube.

LOCATION OF CONTROLS

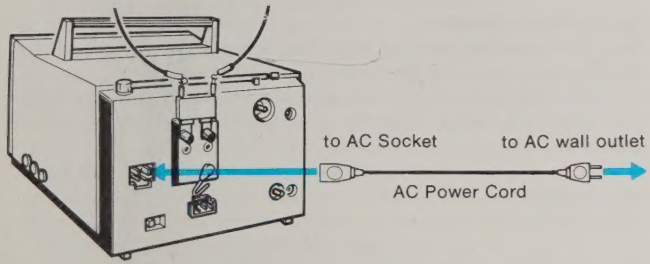


POWER SOURCES

House current operation

Insert the 2-hole plug of the AC Power Cord (supplied) into the AC Socket at the rear of the TV and connect the other end of the cord to a convenient wall outlet (120 V).

- When the AC Power Cord is plugged into the AC Socket, the DC power supply to the TV is automatically disconnected, even if a battery pack is connected to the TV.



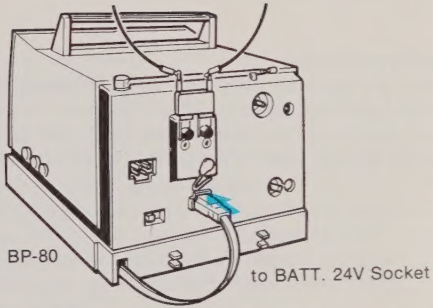
Rechargeable battery operation

The Sony Battery Pack BP-80 (optional) is specially designed to be used with the KV-8000 and permits TV viewing at any place where house current is not available.

First check that the POWER PULL ON/VOLUME Control is pushed in. Then place the TV on the BP-80 so that the rear projections of the TV fit into the rear holes of the BP-80. Secure the supplied four screws at the bottom of the BP-80. Plug the DC Power Cord of the BP-80 into the BATT. 24V Socket at the rear of the TV. Then turn on the TV.

- Make sure that the AC Power Cord and the car battery cord are disconnected from the set.

The fully charged BP-80 permits approximately 3 hours of continuous or intermittent TV viewing. When the picture shrinks and disappears and the red [START RECHARGE] Lamp at the front of the BP-80 lights, the batteries are exhausted. Recharge the BP-80.



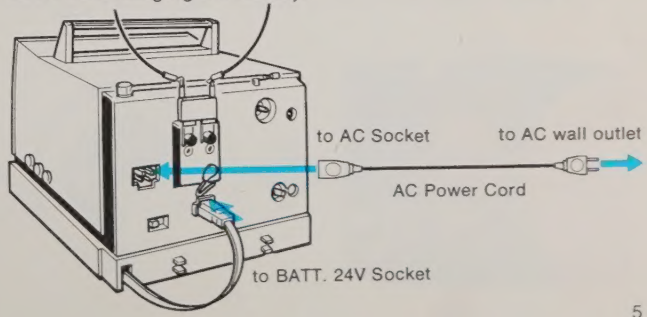
Recharging

After each use, recharge the battery pack; complete the connections as illustrated, set the Charging Switch at the rear to [CHARGE], and turn on the TV. Recharging will then start (no picture nor sound comes on). While recharging, the green lamp lights.

Approximately 10 hours is required for full recharging.

If you wish to view the TV while recharging, set the Charging Switch to [OPERATE]. In this case, approximately 24 hours will be required for full recharging.

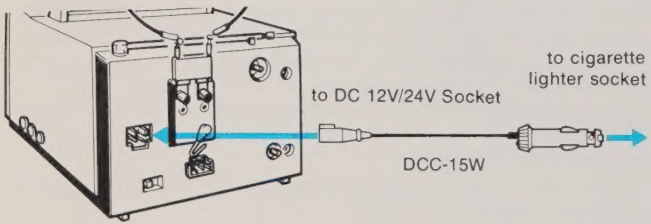
- After recharging, be sure to disconnect the AC Power Cord to avoid overcharging the battery.



Car battery operation

The KV-8000 operates on a 12 V or 24 V car battery through the cigarette lighter socket of a car.

Connect the Sony Car Battery Cord DCC-15W (optional) as illustrated. For details, refer to the DCC-15W instructions.



OPERATION

To switch on the TV

Pull the POWER PULL ON/VOLUME Control. The picture will appear in a few seconds. To switch off, push in this knob.

To increase the sound

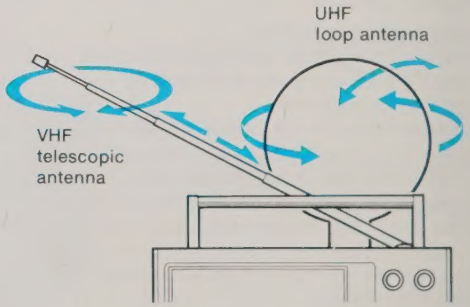
Turn the POWER PULL ON/VOLUME Control clockwise ↷. To decrease, turn it counterclockwise ↶.

To adjust the antenna

For VHF reception, use the VHF Telescopic Antenna: adjust the length, direction and angle for the best possible picture.

For UHF reception, use the loop antenna: raise and swing the loop back and forth and/or sideways until the best available picture is obtained.

- Make sure that the loop and telescopic antennas do not touch each other.



To operate in the automatic mode

Set the AFT Switch to ON. The AFT (Automatic Fine Tuning) locks in the correct signal to secure a sharper picture. Set the AUTO Switch to ON. The AUTO Lamp will light indicating the automatic mode, and the color circuits lock to preset values of hue and color to provide correct reproduction.

To select the desired VHF channel (2–13)

Turn the VHF Channel Selector until the desired channel number appears in the indicator window. After initial adjustment, there will normally be no need for fine tuning readjustment on the VHF channels. However, if the picture is not clear, adjust fine tuning as follows:

Push in the VHF Fine Tuning Knob and turn it clockwise until a herringbone pattern appears in the colored parts of the picture. Then turn the knob slowly counterclockwise and release it at the point where the herringbone pattern just disappears and the picture is clear. This is the correct tuning point.

- When the VHF fine tuning adjustment is made for the first time, it may be necessary to turn the Fine Tuning Knob several rotations. Subsequent corrections will require a smaller degree of adjustment.
- In the automatic mode, when the VHF Fine Tuning Knob is pushed in, the AFT is disengaged in order to fine-tune the channel manually. When you release the knob, the AFT will be reactivated to maintain correct tuning.

To select the desired UHF channel (14–83)

First turn the VHF Channel Selector until the letter U appears in the indicator window. Then turn the UHF Channel Selector until the desired channel number appears in the indicator window. In case of extreme interference, or of an extremely weak station, adjust the fine tuning as follows:

❶ Set the AFT Switch to OFF in order to disengage the AFT.
❷ Slowly turn the UHF Fine Tuning Knob clockwise until a herringbone pattern appears in the colored parts of the picture. Then slowly turn the knob counterclockwise until the herringbone pattern just disappears and the picture is clear.
❸ Reset the AFT Switch to ON in order to reactivate the AFT mode or leave it OFF, whichever provides better reception.

CAUTION: The UHF Channel Selector cannot be turned directly from 83 to 14 or from 14 to 83. Do not try to force it to do so.

Herringbone pattern

Clear picture

To adjust brightness and contrast

Correct brightness and contrast settings are important for good color reproduction. Once the brightness has been set correctly, the contrast can be controlled with the PICTURE Control without altering color reproduction. Perform the following adjustments.

❶ Turn the PICTURE Control fully counterclockwise.

❷ Adjust the BRIGHTness Control for the desired brightness level.

❸ Adjust the PICTURE Control from the lowest setting to the desired level according to your preference and room lighting conditions.

The PICTURE Control will adjust the contrast, color intensity and brightness simultaneously in the proper ratio.

Earphone jacks

For private listening, insert the earphone plug into the [·] receptacle. This disconnects the loudspeaker. The use of the [:] receptacle permits the earphone and the loudspeaker to be used simultaneously. TV sound may be recorded by connecting a tape recorder to the [:] receptacle with a suitable connecting cord. Adjust the TV volume for a normal listening level.

Vertical hold control

If the picture rolls vertically, adjust the Vertical HOLD Control at the rear.

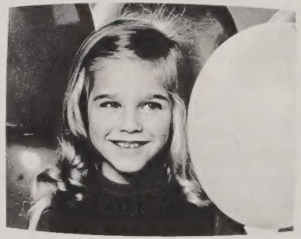
To adjust color and hue manually

Both COLOR and HUE Controls have a limited adjustment range in the AUTO mode. If you wish to control color reproduction manually, set the AUTO Switch to OFF so that the AUTO Lamp goes out, thus disengaging the automatic color mode.

Adjust the COLOR Control for the desired color intensity.

Picture becomes pale.

Picture becomes vivid.



Adjust the HUE Control for the most natural skin tones.

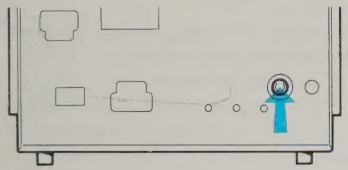
Skin tones become purplish.

Skin tones become greenish.

• COLOR and HUE adjustments have no effect upon black and white programs.

DEGAUSS button

Accidental contact or proximity to a magnetized object, such as a loudspeaker, magnetized screwdriver, scissors, or a toy which uses a magnet can magnetize the picture tube. This will cause poor color over portions of the picture. To demagnetize the picture tube, momentarily push the DEGAUSS Button at the rear of the set.

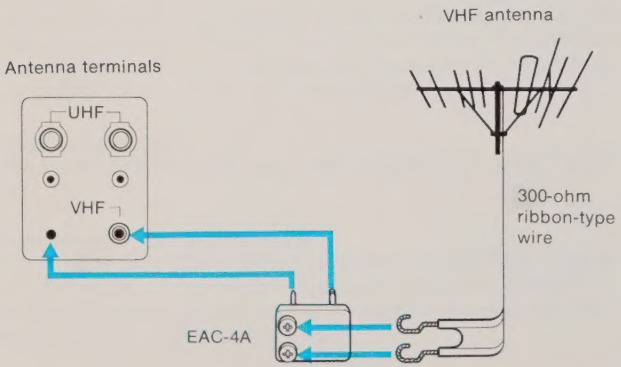


EXTERNAL ANTENNAS

In difficult reception areas (inside a steel-frame building, in mountainous areas, or at great distances from the transmitter), the use of an external antenna will give better reception.

VHF antenna connection

❶ Strip the plastic insulation from the end of the 300-ohm ribbon-type lead-in wire.
❷ Loosen the nuts on the terminals of the External Antenna Connector EAC-4A (supplied) and wrap the bare copper leads around the terminals.
❸ Tighten the nuts of the terminals.
❹ Remove the plug inserted into the VHF antenna jack of the TV.
❺ Insert the EAC-4A into the VHF antenna jack of the TV.

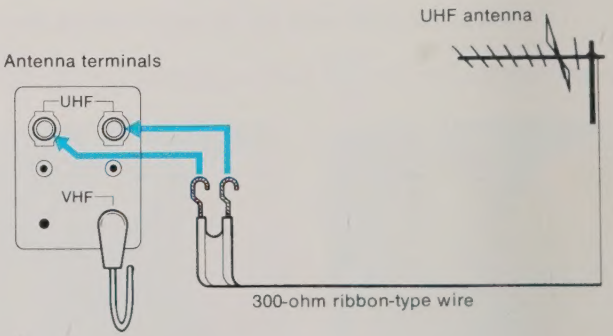


UHF antenna connection

When using an outdoor antenna, disconnect the UHF loop antenna from the antenna terminals.
Direct connection to the UHF antenna terminals can be made in the same way as explained for VHF antenna connection to the EAC-4A.

❶ Strip the plastic insulation from the end of the 300-ohm ribbon-type lead-in wire.
❷ Loosen the nuts on the UHF antenna terminals and wrap the bare copper leads around the terminals.
❸ Tighten the nuts of the terminals.

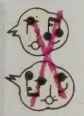
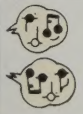
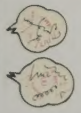
The use of the EAC-12 (optional) will permit an easier connection. Coaxial cable connections to the UHF antenna terminals can be made conveniently with the EAC-13W (optional)



For optimum reception in your car, the Sony Car Antenna VCA-3W or VCA-4 is recommended.

CHECKING THE SET BY YOURSELF

Many apparent malfunctions may be caused by slight misadjustments of the regular controls or some other equally simple cause. If any difficulty arises in the operation of your set, first check through this illustrated list of symptoms and corrections.
Should any difficulty persist, unplug the set and contact your Sony dealer.

SYMPTOM	CORRECTION
 **no picture (screen not lit), no sound**	• Is the AC Power Cord plugged into an operative outlet? • If operating on the BP-80, have the AC Power Cord and the Car Battery Cord been disconnected? Check for discharged battery. Check that the Charging Switch is set to [OPERATE].
 **no picture (screen not lit), but good sound**	• Turn the BRIGHTness or PICTURE Control clockwise.
good picture but no sound	• Turn the POWER PULL ON/VOLUME Control clockwise. • Check that the earphone is disconnected from the [·] earphone jack.
 **no picture, no sound, but snow and noise only**	• Is the Telescopic Antenna adjusted properly? • Is the plug at the rear plugged into the VHF Antenna Jack? • On UHF, is the loop antenna connected and adjusted properly? • Check any external antenna used.

SYMPTOM	CORRECTION
no color	• Check that the AUTO Switch is set to ON. • Check that the AFT Switch is set to ON. • Check that the COLOR Control is not turned fully counterclockwise. • Readjust the fine tuning.
herringbone pattern, stripes, no color, no picture, too indistinct, etc.	• Readjust the fine tuning.
dotted lines or stripes	• Often caused by interference from autos, neon signs, hair dryers, electric razors, etc. Try adjusting the antenna for minimum interference.
double images or "ghosts"	• Readjust the indoor antenna. Reflections from nearby mountains or buildings often cause this problem. In such cases, a highly directional outdoor antenna may improve the picture.

SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF channels 2 – 13
	UHF channels 14 – 83 (70-position detent tuner)
Picture tube	TRINITRON tube
	8-inch picture measured diagonally
	70-degree deflection
Antenna	VHF telescopic antenna
	UHF loop antenna
	75-ohm external antenna jack for VHF
	300-ohm external antenna terminals for UHF
Speaker	10 cm (4 inches) dia.
Power requirements	120 V ac, 60 Hz
	12 V or 24 V dc
Power consumption	45 W (max.) ac
	30 W dc (24 V), 36 W dc (12 V)
Dimensions	Approx. 298 × 270 × 364 mm (w/h/d)
	(11¾ × 10⅝ × 14⅜ inches)
Weight	Approx. 8.8 kg (19 lb 6 oz)
Accessories supplied	Earphone
	AC Power Cord
	External Antenna Connector EAC-4A
Optional accessories	Battery Pack BP-80
	Car Battery Cord DCC-15W
	External Antenna Connector EAC-12, EAC-13W
	Car Antenna VCA-3W, VCA-4

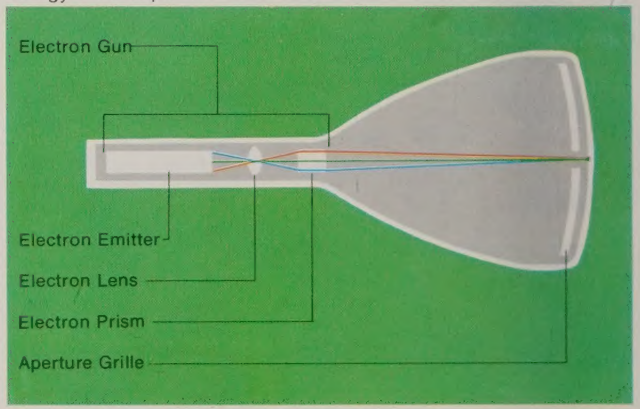
Design and specifications are subject to change without notice.

TRINITRON SYSTEM

Your Sony Color TV employs the latest concept in color-image reproduction...the TRINITRON System. A product of intensive engineering research, the TRINITRON System ensures bright, sharp pictures and few service requirements.

The system consists of the TRINITRON Gun and "Aperture Grille". The TRINITRON Gun produces the three beams that excite the primary phosphors on the screen. The beams are aimed and focussed by a unique set of electron lenses and a pair of electron prisms. Pictures stay sharp at all points on the screen because all three beams pass through the center of a large lens. The Aperture Grille color-selection system allows a larger amount of electrons to pass through it to provide high brightness on the screen.

"Guard Grille", a series of non-reflecting vertical stripes that alternate with the phosphor color stripes, absorbs ambient light reflections. Moreover, this TV employs newly developed phosphors. The result is a high-contrast, brighter picture with no increase in energy consumption.



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Sony Corporation

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